## HMH (into) Math" Grade K

## Unit 1: Count Sequence and Numbers to 5

Unit 1 Project: The Number Museum
Unit 1 Learning Mindset Focus: Get Help / Identifies Need for Help

## Module 1: Represent Numbers to 5 with Objects

Recommended Pacing with Assessments: 7 Days

## Module 1 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :--- | :--- | :--- |
| Children used counting and <br> number to determine quantities <br> up to five. | Children count objects, saying <br> the number names in standard <br> order. <br> Children pair each object with <br> only one number name and each <br> number name with only one <br> object. | Children will count to 120, <br> starting at any number less than <br> 120. |
| Children will read and write <br> numerals and represent a <br> number of objects with a written <br> numeral. |  |  |
| last number said tells the the |  |  |
| number of objects counted. |  |  |
| Children count to answer "how |  |  |
| many?" questions. |  |  |
| Children count out a number of |  |  |
| objects to match a given number. |  |  |$\quad$.

## Module 1 Vocabulary

and plus in Add To and Put Together situation problems
five one greater than four; one less than six
four one greater than three; one less than five
one a single object
three one greater than two; one less than four
two one greater than one; one lesson than three
zero no objects; a cardinal number indicating an empty set

## Lesson 1.1 Represent 1 and 2

Build Understanding - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.


## I Can Objective

I can draw pictures to represent the numbers 1 and 2.

## Learning Objective

Understand 1 and 2 by using objects to represent and count.

## Language Objective

Use the words one and two and explain how to identify and make groups of 1 and 2 objects.

## Vocabulary

New: one, two

## Lesson Materials

two-color counters, connecting cubes, MathBoard

## Lesson 1.2 Represent 3 and 4 Build Understanding - 1 Day

| Conceptual |
| :---: | :---: | :---: |
| Build Understanding | | Conceptual and Procedural |
| :---: |
| Connect Concepts and Skills | | Procedural |
| :---: |
| Apply and Practice |

## Mathematics Standards

When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.


## I Can Objective

I can draw pictures to represent the numbers 3 and 4.

## Learning Objective

Understand 3 and 4 by using objects to represent and count.

## Language Objective

Use the words three and four and explain how to identify and make groups of 3 and 4 objects.

## Vocabulary

New: four, three

## Lesson Materials

two-color counters, connecting cubes, MathBoard

## Lesson 1.3 Represent 5

Build Understanding - 1 Day

| Conceptual | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.


## I Can Objective

I can draw pictures to represent numbers up to 5 .

## Learning Objective

Understand counting up to 5 by using objects to represent and count.

## Language Objective

Use the word five and explain how to identify and make groups of up to 5 objects.

## Vocabulary

New: five

## Lesson Materials

two-color counters, connecting cubes, MathBoard

## Lesson 1.4 Represent 0 <br> Build Understanding - 1 Day <br> Professional Learning Video

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.


## I Can Objective

I can show the difference between groups of 0 and other numbers.

## Learning Objective

Understand 0 to 5 by using objects to count and represent a word problem.

## Language Objective

Use the word zero and explain how to identify and make groups of 0 to 5 objects.

## Vocabulary

New: zero

## Lesson Materials

two-color counters, connecting cubes, MathBoard

## Lesson 1.5 Ways to Make 5

Connect Concepts and Skills - 1 Day

| Conceptual |
| :---: | :---: | :---: |
| Build Understanding | | Conceptual and Procedural |
| :---: |
| Connect Concepts and Skills |$\quad$| Procedural |
| :---: |
| Apply and Practice |

## Mathematics Standards

Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 $=2+3$ and $5=4+1$ ).

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Look for and make use of structure.


## I Can Objective

I can make a group of five objects starting with two different groups.

## Learning Objective

Understand 5 in more than one way by using two groups of objects or drawings to represent 5.

## Language Objective

Explain how to make groups of 5 in more than one way.

## Vocabulary

New: and

## Lesson Materials

two-color counters, connecting cubes, MathBoard

## HMH (into) Math" Grade K

## Unit 1: Count Sequence and Numbers to 5

Unit 1 Project: The Number Museum
Unit 1 Learning Mindset Focus: Get Help / Identifies Need for Help

## Module 2: Represent Numbers to 5 with a Written Numeral <br> Recommended Pacing with Assessments: 7 Days

## Module 2 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :--- | :--- | :--- |
| Children counted up to five <br> objects. | Children say the numbers zero <br> to five. <br> Children represented numbers <br> zero to five. | Children write the numbers zero <br> to five. <br> represent numbers to 120. |
| Children counted to answer <br> "how many?" questions. | Children will read and write <br> objects with a written numeral. <br> numerals to 120. |  |
| Children counted out a number <br> of objects to match a given <br> number. | Children count to answer "how <br> many?" questions. |  |

## Module 2 Vocabulary

| five | one greater than four; one less than six |
| ---: | :--- |
| four | one greater than three; one less than five |
| one | a single object |
| three | one greater than two; one less than four |
| two | one greater than one; one less than three |
| zero | no objects; none; a cardinal number indicating an empty set |
| count | to determine the number of |
| larger | describes a group that has more objects than another group |

## Lesson 2.1 Count and Write 0 and 1

Connect Concepts and Skills - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20
(with 0 representing a count of no objects).
When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.


## I Can Objective

I can count and write the numbers 0 and 1 .

## Learning Objective

Understand the written numerals by counting and writing 0 and 1 .

## Language Objective

Explain how to show the numbers 0 and 1 .

## Vocabulary

Review: one, zero
New: count

## Lesson Materials

two-color counters, connecting cubes, MathBoard

## Lesson 2.2 Count and Write 2 and 3 Connect Concepts and Skills - 1 Day Professional Learning Video

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.


## I Can Objective

I can count and write the numbers 2 and 3.

## Learning Objective

Understand the written numerals by counting and writing 2 and 3.

## Language Objective

Explain how to show the numbers 2 and 3 .

## Vocabulary

Review: three, two

## Lesson Materials

two-color counters, connecting cubes, MathBoard

## Lesson 2.3 Count and Write 4 and 5 <br> Connect Concepts and Skills - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.


## I Can Objective

I can count and write the numbers 4 and 5.

## Learning Objective

Understand the written numerals by counting and writing 4 and 5 .

## Language Objective

Explain how to show the numbers 4 and 5 .

## Vocabulary

Review: five, four

## Lesson Materials

two-color counters, connecting cubes, MathBoard

## Lesson 2.4 Count and Write Numbers to 5 <br> Apply and Practice - 1 Day

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.


## I Can Objective

I can count objects to 5 and write the correct number.

## Learning Objective

Understand the written numerals by counting and writing 0 to 5 .

## Language Objective

Identify the numerals 0 to 5 and explain how to show each number.

## Lesson 2.5 Count and Order to 5

Apply and Practice - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Understand that each successive number name refers to a quantity that is one larger.

When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

## Mathematical Practices and Processes

- Use appropriate tools strategically.
- Look for and make use of structure.


## I Can Objective

I can make groups of 1 to 5 in the correct order.

## Learning Objective

Understand each successive number refers to a quantity that is one larger by using objects to demonstrate the order of numbers.

## Language Objective

Use the word order and explain how to put groups of objects or numbers in order.

## Vocabulary

New: larger

## Lesson Materials

two-color counters, connecting cubes

## HMH (into) Math"' Grade K

Unit 1: Count Sequence and Numbers to 5<br>Unit 1 Project: The Number Museum<br>Unit 1 Learning Mindset Focus: Get Help / Identifies Need for Help

## Module 3: Matching and Counting Numbers to 5

Recommended Pacing with Assessments: 8 Days

## Module 3 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :--- | :--- | :--- |
| $\begin{array}{l}\text { Children counted and ordered } \\ \text { numbers to five. } \\ \text { Children represented numbers } \\ \text { zero to five. }\end{array}$ | $\begin{array}{l}\text { Children identify whether the } \\ \text { number of objects in one group } \\ \text { is greater than, less than, or } \\ \text { equal to the number of objects in } \\ \text { another group. }\end{array}$ | $\begin{array}{l}\text { Children will compare two-digit } \\ \text { numbers based on meanings of } \\ \text { the tens and ones digits. }\end{array}$ |
| Children use counting and |  |  |
| matching strategies to compare |  |  |
| groups of objects. |  |  |\(\left.\quad \begin{array}{l}Children will record <br>

comparisons with the symbols >, and <. <br>
=,\end{array}\right\}\)

## Module 3 Vocabulary

count to determine the number of
larger describes a group that has more objects than another group
compare
to describe whether amounts or sizes are the same as, less than, or greater than each other
equal to a number or amount that is the same as
greater than larger in size or more in quantity or amount
less than having a value that is not as great as another value
match to pair objects using one-to-one correspondence

# Lesson 3.1 Identify a Greater Number of Objects Within 5 <br> Build Understanding - 1 Day Professional Learning Video 

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Use appropriate tools strategically.


## I Can Objective

I can draw to show two groups and compare them to find out which group has a greater number of objects.

## Learning Objective

Identify the group that has a number of objects greater than the number of objects in another group.

## Language Objective

Understand and use the term greater than, along with the related words greater and more.

## Vocabulary

Review: larger
New: greater than

## Lesson Materials

two-color counters, connecting cubes, MathBoard

## Lesson 3.2 Identify a Lesser Number of Objects Within 5

 Build Understanding - 1 Day| Conceptual | Conceptual and Procedural | Procedural |
| :---: | :---: | :---: |
| Build Understanding | Connect Concepts and Skills | Apply and Practice |

## Mathematics Standards

Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Use appropriate tools strategically.


## I Can Objective

I can draw to show two groups and compare them to find out which group has a lesser number of objects.

## Learning Objective

Identify the group that has a number of objects less than the number of objects in another group.

## Language Objective

Understand and use the term less than, along with the related words lesser and fewer.

## Vocabulary

New: less than

## Lesson Materials

two-color counters, connecting cubes, MathBoard

# Lesson 3.3 Match Equal Groups of Objects Within 5 Build Understanding - 1 Day 

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

## Mathematical Practices and Processes

- Attend to precision.
- Look for and make use of structure.


## I Can Objective

I can count and match to show two equal groups.

## Learning Objective

Understand comparing equal groups by counting and matching groups with an equal number of objects.

## Language Objective

Understand and use the terms equal to and match while practicing less than and greater than.

## Vocabulary

New: equal to, match

## Lesson Materials

two-color counters, connecting cubes, MathBoard

## Lesson 3.4 Compare Groups Within 5 by Counting Connect Concepts and Skills - 1 Day

| Conceptual |  |  |
| :---: | :---: | :---: |
| Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |

## Mathematics Standards

Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.


## I Can Objective

I can compare numbers by counting and describe groups by saying greater than, less than, or equal to.

## Learning Objective

Understand comparing groups of objects by using a counting strategy.

## Language Objective

Explain how to use counting to compare groups of objects.

## Vocabulary

Review: count
New: compare

## Lesson Materials

two-color counters, connecting cubes, MathBoard

# Lesson 3.5 Compare Groups Within 5 by Matching <br> Connect Concepts and Skills - 1 Day 

| Conceptual |
| :---: | :---: | :---: |
| Build Understanding | | Conceptual and Procedural |
| :---: |
| Connect Concepts and Skills | | Procedural |
| :---: |
| Apply and Practice |

## Mathematics Standards

Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.


## I Can Objective

I can draw a group that shows a number greater than, less than, or equal to another group, write the numbers, match the groups, and say if a group is greater than, less than, or equal to.

## Learning Objective

Understand comparing groups of objects by using a matching strategy.

## Language Objective

Explain how to use matching to compare groups of objects.

## Lesson Materials

two-color counters, connecting cubes, MathBoard

## Lesson 3.6 Compare Numbers Within 5 <br> Apply and Practice - 1 Day

| Conceptual | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Compare two numbers between 1 and 10 presented as written numerals.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.
- Look for and express regularity in repeated reasoning.


## I Can Objective

I can write numbers, compare them by counting, and say comparison sentences with greater than, less than, or equal to.

## Learning Objective

Understand comparing two numbers by using the counting order.

## Language Objective

Use the words greater and less and explain how to identify the number that is greater than or less than another number.

## Lesson Materials

connecting cubes, two-color counters

## HMH (into) Math" Grade K

## Unit 1: Count Sequence and Numbers to 5

Unit 1 Project: The Number Museum
Unit 1 Learning Mindset Focus: Get Help / Identifies Need for Help

## Module 4: Classify, Count, and Sort Objects

Recommended Pacing with Assessments: 6 Days

## Module 4 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :--- | :--- | :--- |
| Children compared groups <br> within 5. <br> Children counted and <br> represented a number of objects <br> within 5.Children classify and count by <br> color. | Children classify and count by <br> Shape. <br> interpret data. represent and |  |
| Children classify and count by <br> size. <br> Children classify, count, and sort <br> by count. |  |  |

## Module 4 Vocabulary

```
big large; not little
category a group or set into which things with common attributes are sorted
    classify to group pieces of data according to how they are the same
        size how big or small something is
    shape the form or outline of something
        small little; not large
        sort to group pieces of data according to how they are the same
```


# Lesson 4.1 Classify and Count by Color <br> Connect Concepts and Skills - 1 Day Professional Learning Video 

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Use appropriate tools strategically.


## I Can Objective

I can sort objects by color and write the number of objects in each group.

## Learning Objective

Classify objects by color and count how many of each color.

## Language Objective

Explain how to sort objects into groups of the same colors.

## Vocabulary

New: category, classify

## Lesson Materials

red crayons, blue crayons, connecting cubes, two-color counters, MathBoard

## Lesson 4.2 Classify and Count by Shape

Connect Concepts and Skills - 1 Day

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Use appropriate tools strategically.


## I Can Objective

I can sort objects by shape and write the number of objects in each group.

## Learning Objective

Classify objects by shape and count how many of each shape.

## Language Objective

Explain how to sort objects into groups of the same shapes.

## Vocabulary

New: shape

## Lesson Materials

plane shapes that include circle, square, triangle, and rectangle; connecting cubes; MathBoard

## Lesson 4.3 Classify and Count by Size <br> Connect Concepts and Skills - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Use appropriate tools strategically.


## I Can Objective

I can classify objects by size to sort them, determine how many are in each category, and write the number for each group.

## Learning Objective

Classify objects by size and count how many of each size.

## Language Objective

Explain how to sort objects into groups of the same sizes.

## Vocabulary

New: big, size, small

## Lesson Materials

two-color counters, MathBoard

## Lesson 4.4 Classify, Count, and Sort by Count Apply and Practice - 1 Day

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.


## I Can Objective

I can sort a group of objects, find the total in each category, and sort the objects by count.

## Learning Objective

Classify objects, count the objects in each category, and sort the categories by count.

## Language Objective

Explain how to classify objects, count the objects in each category, and sort the categories by count.

## Vocabulary

New: sort

## Lesson Materials

connecting cubes of assorted colors; plane shapes that include circle, square, triangle, and rectangle

## HMH (into) Math" Grade K

## Unit 1: Count Sequence and Numbers to 5

Unit 1 Project: The Number Museum
Unit 1 Learning Mindset Focus: Get Help / Identifies Need for Help

## Module 5: Add To and Take From Within 5

Recommended Pacing with Assessments: 14 Days

## Module 5 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :--- | :--- | :--- |
| $\begin{array}{l}\text { Children represented and wrote } \\ \text { numbers to 5. }\end{array}$ | $\begin{array}{l}\text { Children solve addition and } \\ \text { subtraction word problems } \\ \text { within 5 by using objects or } \\ \text { drawings to represent the } \\ \text { Children understood the } \\ \text { relationship between numbers } \\ \text { and quantities. }\end{array}$ | $\begin{array}{l}\text { Children will use addition and } \\ \text { subtraction within 20 to solve } \\ \text { word problems involving } \\ \text { situations of adding to, taking } \\ \text { from, putting together, taking } \\ \text { apart, and comparing, with }\end{array}$ |
| Children counted to answer |  |  |
| "how many" questions. |  |  |\(\left.\quad \begin{array}{l}Children represent addition and <br>

subtraction with objects, fingers, <br>
mental images, drawings, <br>
sounds, acting out situations, <br>
verbal explanations, <br>
expressions, or equations. <br>
equationg objects, drawings, and <br>
equith a symbol for the <br>
unknown number to represent <br>
the problem).\end{array}\right\}\)

## Module 5 Vocabulary

Add To to join one set to another
equation a statement that one quantity is equal to another
is equal to a number or amount that is the same as
join to put two groups together
minus take away; a symbol that shows subtraction
plus add to; a symbol that shows addition
take away to remove one quantity from another
Take From to remove one quantity from another
total the number in all
subtract taking apart or comparing sets

# Lesson 5.1 Act Out Addition Problems Within 5 <br> Build Understanding - 1 Day 

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural |
| :---: | :---: | :---: |
| Connect Concepts and Skills | Apply and Practice |  |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.


## I Can Objective

I can add to a group to find how many there are now and represent the problem with numbers.

## Learning Objective

Represent an addition problem by acting out and drawing.

## Language Objective

Describe how groups change when acting out addition problems.

## Vocabulary

New: join, total

## Lesson Materials

MathBoard, connecting cubes, two-color counters

## Lesson 5.2 Act Out Subtraction Problems Within 5 <br> Build Understanding - 1 Day Professional Learning Video

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Solve addition and subtraction word problems, and add and subtract within 10 , e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.


## I Can Objective

I can subtract one group from another group to find how many there are now and represent the problem with numbers.

## Learning Objective

Represent a subtraction problem by acting out and drawing.

## Language Objective

Describe how groups change when acting out subtraction problems.

## Vocabulary

New: take away

Lesson Materials<br>two-color counters

# Lesson 5.3 Solve Add To Problems Within 5 <br> Connect Concepts and Skills - 2 Days 

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Solve addition and subtraction word problems, and add and subtract within 10 , e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Model with mathematics.


## I Can Objective

I can solve an addition problem and model the problem with an equation.

## Learning Objective

Solve Add To problems with actions, drawings, and equations.

## Language Objective

Explain how to add two groups of objects using action, drawings, and equations.

## Vocabulary

New: Add To, equation, is equal to, plus

## Lesson Materials

counters, connecting cubes

## Lesson 5.4 Solve Take From Problems Within 5 <br> Connect Concepts and Skills - 2 Days

| Conceptual |
| :---: | :---: | :---: |
| Build Understanding | | Conceptual and Procedural |
| :---: |
| Connect Concepts and Skills | | Procedural |
| :---: |
| Apply and Practice |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Model with mathematics.


## I Can Objective

I can solve a subtraction problem and model the problem with an equation.

## Learning Objective

Represent Take From problems with action, drawings, and equations.

## Language Objective

Explain how to solve subtraction problems within 5 with action, drawings, and numbers.

## Vocabulary

New: subtract, Take From

## Lesson Materials

counters, connecting cubes

## Lesson 5.5 Write Addition Equations Within 5 <br> Apply and Practice - 2 Days

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Model with mathematics.


## I Can Objective

I can model addition problems by writing equations.

## Learning Objective

Understand how to represent addition problems with drawings and equations.

## Language Objective

Explain how an equation models an addition problem.

## Lesson Materials

counters, connecting cubes

## Lesson 5.6 Write Subtraction Equations Within 5 <br> Apply and Practice - 2 Days

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Model with mathematics.


## I Can Objective

I can model subtraction problems by writing equations.

## Learning Objective

Understand how to represent subtraction problems with a drawing and an equation.

## Language Objective

Explain how to draw and use equations to model subtraction problems.

Lesson Materials
counters, connecting cubes

# Lesson 5.7 Solve Result Unknown Word Problems Within 5 <br> Apply and Practice - 2 Days 

| Conceptual | Conceptual and Procedural | Procedural |
| :---: | :---: | :---: |
| Build Understanding | Connect Concepts and Skills | Apply and Practice |

## Mathematics Standards

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

Fluently add and subtract within 5.
Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Model with mathematics.


## I Can Objective

I can determine whether a problem is an addition or a subtraction problem, solve the problem, and model it with an equation.

## Learning Objective

Understand how to solve result unknown word problems within 5.

## Language Objective

Explain how to solve addition and subtraction word problems.

## Lesson Materials

counters, connecting cubes

## HMH (into) Math"' Grade K

## Unit 1: Count Sequence and Numbers to 5

Unit 1 Project: The Number Museum
Unit 1 Learning Mindset Focus: Get Help / Identifies Need for Help

## Module 6: Put Together and Take Apart Within 5

Recommended Pacing with Assessments and Performance Task: 15 Days

## Module 6 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :--- | :--- | :--- |
| $\begin{array}{l}\text { Children solved Add To addition } \\ \text { problems. }\end{array}$ | $\begin{array}{l}\text { Children solve addition and } \\ \text { subtraction word problems } \\ \text { within 5 by using objects or } \\ \text { Children solved Take From } \\ \text { subtraction problems. } \\ \text { prowings to represent the }\end{array}$ | $\begin{array}{l}\text { Children will use addition and } \\ \text { subtraction within 20 to solve } \\ \text { word problems involving } \\ \text { situations of adding to, taking } \\ \text { from, putting together, taking } \\ \text { apart, and comparing, with }\end{array}$ |
| unknowns in all positions (e.g., |  |  |
| Children represent addition and |  |  |
| subtraction with objects, fingers, |  |  |
| mental images, drawings, |  |  |
| sounds, acting out situations, |  |  |
| verbal explanations, |  |  |
| expressions, or equations. |  |  |
| equations with a symbol for for the |  |  |
| unknown |  |  |$]$

## Module 6 Vocabulary

Put Together to combine two groups
Take Apart to separate a group into two groups

# Lesson 6.1 Represent Addition Problems Within 5 Using Objects and Drawings <br> Build Understanding - 1 Day Professional Learning Video 

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Use appropriate tools strategically.


## I Can Objective

I can represent an addition problem with objects or drawings and find the total.

## Learning Objective

Represent addition problems with objects and drawings.

## Language Objective

Use addition vocabulary to describe representations of addition problems.

## Vocabulary

New: Put Together

## Lesson Materials

two-color counters, connecting cubes, crayons, MathBoard

## Lesson 6.2 Represent Subtraction Problems Within 5 Using Objects and Drawings <br> Build Understanding - 1 Day

| Conceptual |
| :---: | :---: | :---: |
| Build Understanding | | Conceptual and Procedural |
| :---: |
| Connect Concepts and Skills | | Procedural |
| :---: |
| Apply and Practice |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively
- Use appropriate tools strategically.


## I Can Objective

I can find the answer to a subtraction problem and represent the problem with objects or drawings.

## Learning Objective

Represent subtraction problems with objects and drawings.

## Language Objective

Use subtraction vocabulary to describe representations of subtraction problems.

## Vocabulary

New: Take Apart

## Lesson Materials

two-color counters, connecting cubes, crayons, MathBoard

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## Lesson 6.3 Solve Put Together Problems Within 5 <br> Connect Concepts and Skills - 2 Days

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.


## I Can Objective

I can solve an addition problem by putting groups together and model the problem with an equation.

## Learning Objective

Solve Put Together problems with objects, drawings, and equations.

## Language Objective

Use addition vocabulary to describe Put Together situations and equations.

## Lesson Materials

two-color counters, connecting cubes, crayons, MathBoard

## Lesson 6.4 Solve Take Apart Problems Within 5 <br> Connect Concepts and Skills - 2 Days

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Model with mathematics.
- Use appropriate tools strategically.


## I Can Objective

I can solve a subtraction problem by taking a group apart and model the problem with an equation.

## Learning Objective

Solve Take Apart problems with objects, drawings, and equations.

## Language Objective

Use subtraction vocabulary to describe Take Apart situations and equations.

## Lesson Materials

two-color counters, connecting cubes, crayons, MathBoard

# Lesson 6.5 Represent Addition Using Mental Images <br> Connect Concepts and Skills - 2 Days 

| Conceptual | Conceptual and Procedural | Procedural |
| :---: | :---: | :---: |
| Build Understanding | Connect Concepts and Skills | Apply and Practice |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Model with mathematics.


## I Can Objective

I can picture two groups in my mind and use the images to find the total, then model the groups with an equation.

## Learning Objective

Solve addition problems with mental images, drawings, and equations.

## Language Objective

Articulate mental images that represent addition using vocabulary such as number names, groups, put together, and add.

## Lesson Materials

two-color counters, connecting cubes, dot plates, dot cards, dominoes, crayons, MathBoard

## Lesson 6.6 Represent Subtraction Using Mental Images

Connect Concepts and Skills - 2 Days

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Model with mathematics.


## I Can Objective

I can take apart a group using mental images, then model the subtraction with an equation.

## Learning Objective

Solve subtraction problems with mental images, drawings, and equations.

## Language Objective

Articulate mental images that represent subtraction using vocabulary such as number names, groups, take apart, and subtract.

## Lesson Materials

two-color counters, connecting cubes, dot plates, dot cards, dominoes, crayons, MathBoard

## Lesson 6.7 Solve Word Problems Within 5

Apply and Practice - 2 Days

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

Fluently add and subtract within 5.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Model with mathematics.


## I Can Objective

I can solve an addition or subtraction problem and model the problem with an equation.

## Learning Objective

Solve addition and subtraction word problems with totals within 5 .

## Language Objective

Explain the difference between addition and subtraction and how to choose an operation and solve a problem.

## HMH (into) Math"' Grade K

Unit 2: Count Sequence and Numbers to 10
Unit 2 Project: 5-and-More Garden
Unit 2 Learning Mindset Focus: Challenge Me / Accepts Challenges

## Module 7: Represent Numbers 6 to 10 with Objects

Recommended Pacing with Assessments: 5 Days

## Module 7 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :--- | :--- | :--- |
| Children counted and <br> represented numbers one to <br> five. | Children count and represent <br> numbers six to ten. <br> Children count and write <br> numerals 6 to 10. <br> Children find ways to make ten. | Children will count and <br> represent numbers to 120. <br> Children will read and write <br> numerals to 120. |

## Module 7 Vocabulary

eight one greater than seven; one less than nine
nine one greater than eight; one less than ten
seven one greater than six; one less than eight
six one greater than five; one less than seven
ten one greater than nine; one less than eleven

## Lesson 7.1 Represent 6 and 7

Build Understanding - 1 Day Professional Learning Video

| Conceptual | Conceptual and Procedural | Procedural |
| :---: | :---: | :---: |
| Build Understanding | Connect Concepts and Skills | Apply and Practice |

## Mathematics Standards

When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Use appropriate tools strategically.


## I Can Objective

I can draw pictures to show the numbers 6 and 7.

## Learning Objective

Use various objects to represent and count numbers 6 and 7.

## Language Objective

Use words to explain how their drawing represents 6 or 7 and relates to the same number of counters, using the words six, seven, and show.

## Vocabulary

New: seven, six

## Lesson Materials

two-color counters, ten frames, number cards, connecting cubes, MathBoard

## Lesson 7.2 Represent 8 and 9 Build Understanding - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Use appropriate tools strategically.


## I Can Objective

I can draw pictures to show the numbers 8 and 9.

## Learning Objective

Use various objects to represent and count numbers 8 and 9 .

## Language Objective

Explain how counters, drawings, and objects represent 8 and 9 using the words eight and nine, and describe adding ones to a number using the word more.

## Vocabulary

New: eight, nine

## Lesson Materials

two-color counters, ten frames, number tiles, number cubes, number cards for 8 and 9 , connecting cubes, MathBoard

## Lesson 7.3 Represent 10

Build Understanding - 1 Day

| Conceptual |
| :---: | :---: | :---: |
| Build Understanding | | Conceptual and Procedural |
| :---: |
| Connect Concepts and Skills | | Procedural |
| :---: |
| Apply and Practice |

## Mathematics Standards

When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Use appropriate tools strategically.


## Learning Objective

Use various objects to represent and count to 10 .

## Language Objective

Say ten, write the numeral, and use words to discuss how the number stays the same when objects are rearranged.

## Vocabulary

New: ten

## Lesson Materials

Two-color counters, connecting cubes, number tiles, grid paper, ten frame, number card for 10

I Can Objective
I can draw pictures to show 10.

## HMH (into) Math"' Grade K

Unit 2: Count Sequence and Numbers to 10
Unit 2 Project: 5-and-More Garden
Unit 2 Learning Mindset Focus: Challenge Me / Accepts Challenges

## Module 8: Represent Numbers 6 to 10 with a Written Numeral

Recommended Pacing with Assessments: 6 Days

## Module 8 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :--- | :--- | :--- |
| Children represented numbers <br> to five. | Children read and write <br> numbers six to ten. | Children will count to 120. <br> Children will read and write <br> numerals. |
| Children will represent a <br> number of objects with a written <br> numeral. |  |  |

## Module 8 Vocabulary

$$
\begin{aligned}
\text { eight } & \text { one greater than seven; one less than nine } \\
\text { nine } & \text { one greater than eight; one less than ten } \\
\text { seven } & \text { one greater than six; one less than eight } \\
\text { six } & \text { one greater than five; one less than seven } \\
\text { ten } & \text { one greater than nine; one less than eleven }
\end{aligned}
$$

# Lesson 8.1 Count and Write 6 and 7 <br> Connect Concepts and Skills - 1 Day Professional Learning Video 

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.


## I Can Objective

I can count 6 and 7 objects and write the numerals 6 and 7 .

## Learning Objective

Count and write 6 and 7.

## Language Objective

Use words to describe how to count and write 6 and 7.

## Vocabulary

Review: seven, six

## Lesson Materials

two-color counters, MathBoard

## Lesson 8.2 Count and Write 8 and 9 <br> Connect Concepts and Skills - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.


## I Can Objective

I can count 8 and 9 objects and write the numerals 8 and 9 .

## Learning Objective

Count and write 8 and 9

## Language Objective

Use words to describe how to count and write 8 and 9 .

## Vocabulary

Review: eight, nine
Lesson Materials
Two-color counters

## Lesson 8.3 Count and Write 10 <br> Apply and Practice - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Write numbers from 0 to 20 . Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.


## I Can Objective

I can count 10 objects and write the numeral 10.

## Learning Objective

Count and write 10.

## Language Objective

Use words to describe how to count and write 10.

## Lesson Materials

Two-color counters

## Lesson 8.4 Count and Order to 10

Apply and Practice - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Understand that each successive number name refers to a quantity that is one larger.

When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Use appropriate tools strategically.


## I Can Objective

I can count in order starting and ending at any number.

## Learning Objective

Use objects to count and order numbers to 10.

## Language Objective

Children will understand what it means to put numbers in order.

## Lesson Materials

two-color counters, connecting cubes, number cards, lined paper, crayons

## HMH (into) Math"' Grade K

Unit 2: Count Sequence and Numbers to 10
Unit 2 Project: 5-and-More Garden
Unit 2 Learning Mindset Focus: Challenge Me / Accepts Challenges

## Module 9: Use the Count Sequence to Count to 100

Recommended Pacing with Assessments: 5 Days

## Module 9 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :--- | :--- | :--- |
| Children rote counted to 5. | Children count to 100 by ones. <br> Children count to 100 by tens. <br> Children count forward from any <br> number to 100. | Children will count to 120 by <br> ones. <br> Children will count to 120 <br> starting at any number less than <br> 120. |
|  |  | Children will read and write <br> numerals and represent <br> quantities with a written <br> numeral. |

## Module 9 Vocabulary

column an arrangement of figures, one above the other
row an arrangement of figures, side by side in a straight line

## Lesson 9.1 Count to 100 by Ones

Build Understanding - 1 Day

| Conceptual |
| :---: | :---: | :---: |
| Build Understanding | | Conceptual and Procedural |
| :---: |
| Connect Concepts and Skills |$\quad$| Procedural |
| :---: |
| Apply and Practice |

## Mathematics Standards

Count to 100 by ones and by tens.

## Mathematical Practices and Processes

- Look for and make use of structure.


## I Can Objective

I can count to 100 by ones

## Learning Objective

Understand the count sequence by counting to 100 by ones.

## Language Objective

Use number charts and calendars to explain how to count up to 100 by ones.

## Vocabulary

New: column, row
Review: eight, nine, seven, six, ten

## Lesson Materials

counters, Corn Maze Puzzle (Teacher Resource Masters)

## Lesson 9.2 Count to 100 by Tens <br> Connect Concepts and Skills - 1 Day Professional Learning Video

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Count to 100 by ones and by tens.

## Mathematical Practices and Processes

- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.


## I Can Objective

I can count to 100 by tens.

## Learning Objective

Understand the count-sequence by counting to 100 by tens

## Language Objective

Explain how to use number charts and calendars to explain how to count up to 100 by tens.

## Lesson Materials

Count by Tens Puzzle (Teacher Resource Masters)

## Lesson 9.3 Count Forward from a Given Number

Apply and Practice - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Count forward beginning from a given number within the known sequence (instead of having to begin at 1).

## Mathematical Practices and Processes

- Attend to precision.
- Look for and make use of structure.


## I Can Objective

I can count forward from a given number other than 1 and stop counting at a specific number.

## Learning Objective

Understand the count sequence by counting on from a given number.

## Language Objective

Use words to describe how to count aloud from a given number up to 100 .

## HMH (into) Math"' Grade K

## Unit 2: Count Sequence and Numbers to 10

Unit 2 Project: 5-and-More Garden
Unit 2 Learning Mindset Focus: Challenge Me / Accepts Challenges

## Module 10: Compare Numbers to 10

Recommended Pacing with Assessments: 8 Days

## Module 10 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :--- | :--- | :--- |
| Children identified a greater or <br> lesser number of objects within <br> 5. | Children identify whether the <br> number of objects within 10 in <br> one group is greater than, less <br> than, or equal to the number of <br> objects in another group. <br> Children identified a greater or <br> lesser number within 5. | Children will compare two 2- <br> digit numbers based on |
| meanings of the tens and ones |  |  |
| digits, recording the results of |  |  |
| comparisons with the symbols >, |  |  |
| =, and <. |  |  |
| matching, and counting, |  |  |
| strategies to identify greater |  |  |
| than, less than, or equal to. |  |  |$\quad$|  |
| :--- |

## Module 10 Vocabulary

compare determine the relative size of a number or quantity
equal to two or more quantities that are the same amount
greater than a larger quantity
less than a smaller quantity

## Lesson 10.1 Identify a Greater Number of Objects within 10 Build Understanding - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Understand that each successive number name refers to a quantity that is one larger.

Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.


## I Can Objective

I can use matching to compare two groups and use this comparison to tell which group has the greater number of objects.

## Learning Objective

Compare the numbers of objects in each of two groups to determine which number is greater.

## Language Objective

Explain how to identify a greater number of objects within 10 .

## Vocabulary

Review: compare, greater than

## Lesson Materials

two-color counters, connecting cubes, MathBoard

## Lesson 10.2 Identify a Lesser Number of Objects within 10 Build Understanding - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.


## I Can Objective

I can use one-to-one comparison to compare two groups and use this comparison to tell which group has the greater number of objects.

## Learning Objective

Compare the numbers of objects in each of two groups to determine which number is less.

## Language Objective

Explain how to identify a lesser number of objects within 10.

## Vocabulary

Review: less than

## Lesson Materials

two-color counters, connecting cubes, MathBoard

## Lesson 10.3 Match Equal Groups of Objects within 10 Build Understanding - 1 Day

| Conceptual |
| :---: | :---: | :---: |
| Build Understanding | | Conceptual and Procedural |
| :---: |
| Connect Concepts and Skills |$\quad$| Procedural |
| :---: |
| Apply and Practice |

## Mathematics Standards

Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.


## I Can Objective

I can use one-to-one correspondence to compare two groups and use this comparison to tell if the groups have an equal number of objects.

## Learning Objective

Compare the numbers of objects in each of two groups to determine if they are equal

## Language Objective

Explain how to use matching to identify if groups are equal.

## Vocabulary

Review: equal to

## Lesson Materials

two-color counters, connecting cubes, MathBoard, index cards, string

## Lesson 10.4 Compare Groups within 10 by Counting

Connect Concepts and Skills - 1 Day

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Use appropriate tools strategically.


## I Can Objective

I can compare groups of objects and numbers within 10 by counting.

## Learning Objective

Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group by counting.

## Language Objective

Explain how to show a number of objects that is greater than, less than, or equal to another group of objects.

## Lesson Materials

Two-color counters, connecting cubes, MathBoard, dot cards (1-9), number cards (1-9)

## Lesson 10.5 Compare Groups within 10 by Matching <br> Connect Concepts and Skills - 1 Day

| Conceptual |
| :---: | :---: | :---: |
| Build Understanding | | Conceptual and Procedural |
| :---: |
| Connect Concepts and Skills | | Procedural |
| :---: |
| Apply and Practice |

## Mathematics Standards

Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.


## I Can Objective

I can compare groups of objects and identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group by matching.

## Learning Objective

Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group by matching.

## Language Objective

Explain how to compare groups by matching.

## Lesson Materials

two-color counters, connecting cubes, dot cards (1-10), MathBoard, ten frames, number cubes

## Lesson 10.6 Compare Numbers within 10

Apply and Practice - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Compare two numbers between 1 and 10 presented as written numerals.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.


## I Can Objective

I can compare two numbers within 10 to determine which is greater, which is less, or if the numbers are equal.

## Learning Objective

Compare two numbers within 10 to determine which is greater, which is less, or if the numbers are equal.

## Language Objective

Explain how to find which number is greater than, less than, or equal to another number.

## Lesson Materials

building blocks, index cards with numbers 0 to 9 , number cards (0-9)

## HMH (into) Math"' Grade K

## Unit 2: Count Sequence and Numbers to 10

Unit 2 Project: 5-and-More Garden
Unit 2 Learning Mindset Focus: Challenge Me / Accepts Challenges

## Module 11: Add To and Take From within 10

Recommended Pacing with Assessments: 14 Days

## Module 11 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :---: | :---: | :---: |
| Children represented and wrote numbers to 10 . <br> Children used counting and numbers to determine quantities up to 10 . <br> Children solved addition and subtraction word problems within 5. | Children represent addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations. <br> Children solve addition word problems within 10 by using objects or drawings. <br> Children solve subtraction word problems within 10 by using objects or drawings. | Children will use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions. <br> Children will develop and use multiple strategies for addition. <br> Children will develop and use multiple strategies for subtraction. |

## Module 11 Vocabulary

Add To join one set to another
is equal to a number or amount that is the same as
minus take away; a symbol that shows subtraction
plus add to; a symbol that shows addition
subtract take apart or compare sets
Take From to remove one quantity from another

# Lesson 11.1 Act Out Addition Problems within 10 Build Understanding - 1 Day 

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Model with mathematics.
- Use appropriate tools strategically.


## I Can Objective

I can act out a group joining another group and add to find the total.

## Learning Objective

Represent an addition problem by acting out and drawing.

## Language Objective

Explain how to represent an addition problem by acting out and drawing.

## Vocabulary

Review: is equal to, plus

## Lesson Materials

counters, connecting cubes, MathBoard

## Lesson 11.2 Act Out Subtraction Problems within 10 Build Understanding - 1 Day

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Model with mathematics.
- Use appropriate tools strategically.


## Learning Objective

Represent a subtraction problem by acting out and drawing.

## Language Objective

Explain how to represent a subtraction problem by acting out and drawing.

## Vocabulary

Review: minus, subtract

## Lesson Materials

counters, connecting cubes, MathBoard

## I Can Objective

I can act out some leaving a group to find how many are left.

## Lesson 11.3 Solve Add To Problems within 10 <br> Connect Concepts and Skills - 2 Days

| Conceptual |
| :---: | :---: | :---: |
| Build Understanding | | Conceptual and Procedural |
| :---: |
| Connect Concepts and Skills | | Procedural |
| :---: |
| Apply and Practice |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
Solve addition and subtraction word problems, and add and subtract within 10 , e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Model with mathematics.
- Use appropriate tools strategically.


## Learning Objective

Solve Add To problems with action, drawings, and an equation.

## Language Objective

Explain how to add two groups of objects using action, drawings, and an equation.

## Vocabulary

Review: Add To

## Lesson Materials

counters, connecting cubes, MathBoard

## I Can Objective

I can find the solution to an Add To addition problem.

## Lesson 11.4 Solve Take From Problems within 10 <br> Connect Concepts and Skills - 2 Days Professional Learning Video

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Model with mathematics.
- Use appropriate tools strategically.


## I Can Objective

I can cross out objects to show how many are taken away and to find how many are left.

## Learning Objective

Solve take from problems with action, drawings, and an equation.

## Language Objective

Pairs explain how they can solve take from problems within 10 with action, drawings, and numbers.

## Vocabulary

Review: Take From

## Lesson Materials

Counters, connecting cubes

## Lesson 11.5 Write Addition Equations within 10 <br> Apply and Practice - 2 Days

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
Solve addition and subtraction word problems, and add and subtract within 10 , e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Model with mathematics.
- Attend to precision.


## I Can Objective

I can write an addition equation to model a problem.

## Learning Objective

Solve addition problems with objects, drawings, and an equation.

## Language Objective

Explain how they solve addition problems with objects, drawings, and an equation.

## Lesson Materials

counters

## Lesson 11.6 Write Subtraction Equations within 10 Apply and Practice - 2 Days

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Solve addition and subtraction word problems, and add and subtract within 10 , e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Model with mathematics.
- Use appropriate tools strategically.


## I Can Objective

I can write an equation to model a subtraction problem and solve it.

## Learning Objective

Solve subtraction problems with objects, drawings, and an equation.

## Language Objective

Explain how to solve subtraction problems with objects, drawings, and an equation.

## Lesson Materials <br> Counters

## Lesson 11.7 Solve Result Unknown Word Problems within 10

 Apply and Practice - 2 Days| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
Solve addition and subtraction word problems, and add and subtract within 10 , e.g., by using objects or drawings to represent the problem.

Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Model with mathematics.


## I Can Objective

I can draw to represent an addition or subtraction word problem and write the equation.

## Learning Objective

Solve result unknown word problems.

## Language Objective

Explain how to solve result unknown word problems.

## HMH (into) Math" Grade K

## Unit 2: Count Sequence and Numbers to 10

Unit 2 Project: 5-and-More Garden
Unit 2 Learning Mindset Focus: Challenge Me / Accepts Challenges

## Module 12: Put Together and Take Apart within 10

Recommended Pacing with Assessments: 10 Days

## Module 12 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :--- | :--- | :--- |
| Children represented addition <br> and subtraction within 5 using <br> objects, drawings, and <br> equations. | Children represent addition and <br> subtraction within 10 using <br> objects, drawings, and <br> equations. | Children will represent addition <br> and subtraction problems within <br> 20 using objects, drawings, and <br> equations. |
| Children solved addition and <br> subtraction word problems <br> within 5 using objects, drawings, <br> and equations. | Children solve addition and <br> subtraction word problems <br> within 10 using objects, <br> drawings, and equations. | Children will solve word <br> problems using addition and <br> subtraction within 20. |

## Module 12 Vocabulary

| is equal to | a number or amount that is the same as |
| ---: | :--- |
| minus | a symbol that shows subtraction |
| plus | add to; a symbol that shows addition |
| Put Together | to combine two groups |
| subtract | taking apart or comparing sets |
| Take Apart | to separate a group into two groups |

# Lesson 12.1 Represent Addition Problems within 10 Using Objects and Drawings <br> Build Understanding - 1 Day 

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Model with mathematics.
- Look for and express regularity in repeated reasoning.


## I Can Objective

I can represent Put Together addition of two groups using drawings, objects, and equations.

## Learning Objective

Understand how objects, drawings, and equations represent addition problems.

## Language Objective

Use Put Together, add, plus, is equal to, and equation to describe drawings and equations showing addition.

## Vocabulary

Review: is equal to, plus

## Lesson Materials

two-color counters, connecting cubes, MathBoard

## Lesson 12.2 Represent Subtraction Problems within 10 Using Objects and Drawings <br> Build Understanding - 1 Day

| Conceptual |
| :---: | :---: | :---: |
| Build Understanding | | Conceptual and Procedural |
| :---: |
| Connect Concepts and Skills |$\quad$| Procedural |
| :---: |
| Apply and Practice |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Use appropriate tools strategically.


## I Can Objective

I can represent Take Apart subtraction using drawings, objects, and equations.

## Learning Objective

Understand how objects, drawings, and equations represent subtraction problems.

## Language Objective

Use Take Apart, subtract, minus, is equal to, and equation for drawings and equations showing subtraction.

## Vocabulary

Review: minus, subtract

## Lesson Materials

two-color counters, connecting cubes, MathBoard

# Lesson 12.3 Solve Put Together Problems within 10 <br> Connect Concepts and Skills - 2 Days Professional Learning Video 

| Conceptual |
| :---: | :---: | :---: |
| Build Understanding | | Conceptual and Procedural |
| :---: |
| Connect Concepts and Skills | | Procedural |
| :---: |
| Apply and Practice |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Use appropriate tools strategically.


## I Can Objective

I can add to a group to find how many there are now and represent the problem with numbers.

## Learning Objective

Use objects, drawings, and equations to solve Put Together problems within 10.

## Language Objective

Use the words Put Together, add, plus, is equal to, and equation to describe drawings and equations representing addition of two groups.

## Vocabulary

Review: Put Together

## Lesson Materials

two-color counters, connecting cubes, MathBoard

## Lesson 12.4 Solve Take Apart Problems within 10 Connect Concepts and Skills - 2 Days

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Solve addition and subtraction word problems, and add and subtract within 10 , e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Use appropriate tools strategically.


## I Can Objective

I can solve subtraction word problems using objects and drawings and write equations to model the problems.

## Learning Objective

Use objects, drawings, and equations to solve Take Apart problems within 10.

## Language Objective

Use Take Apart, subtract, minus, is equal to, and equation for drawings and equations showing subtraction.

## Vocabulary

Review: Take Apart

## Lesson Materials

two-color counters, connecting cubes, MathBoard

## Lesson 12.5 Solve Word Problems within 10

Apply and Practice - 2 Days

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Solve addition and subtraction word problems, and add and subtract within 10 , e.g., by using objects or drawings to represent the problem.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Model with mathematics.


## I Can Objective

I can recognize addition and subtraction word problems and solve problems using objects and drawings and writing equations.

## Learning Objective

Use equations, objects, and drawings to solve Put Together and Take Apart word problems within 10.

## Language Objective

Use addition and subtraction vocabulary appropriately and fluently.

## HMH (into) Math" Grade K

Unit 2: Count Sequence and Numbers to 10
Unit 2 Project: 5-and-More Garden
Unit 2 Learning Mindset Focus: Challenge Me / Accepts Challenges

## Module 13: Ways to Make Numbers to 10

Recommended Pacing with Assessments and Performance Task: 8 Days

## Module 13 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :--- | :--- | :--- |
| $\begin{array}{l}\text { Children solved addition word } \\ \text { problems within } 10 .\end{array}$ | $\begin{array}{l}\text { Children decompose numbers } \\ \text { Children solved subtraction } \\ \text { word problems within 10. } \\ \text { pairs in more than one way. }\end{array}$ | $\begin{array}{l}\text { Children record each } \\ \text { decomposition with a drawing } \\ \text { or equation. }\end{array}$ | \(\left.\begin{array}{l}Children will use addition and <br>

subtraction within 20 to solve <br>
word problems involving <br>
situations of adding to, taking <br>
from, putting together, taking <br>
apart, and comparing, with <br>
unknowns in all positions.\end{array}\right\}\)

## Module 13 Vocabulary

```
equation
a statement that one quantity is equal to another
    addend a number that is added to another
```


## Lesson 13.1 Ways to Make 6 and 7 <br> Connect Concepts and Skills - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 $=2+3$ and $5=4+1$ ).

Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Look for and make use of structure.


## I Can Objective

I can use two different groups of objects or drawings to represent the numbers 6 and 7 in more than one way.

## Lesson 13.2 Ways to Make 8

Connect Concepts and Skills - 1 Day

## Learning Objective

Decompose the numbers 6 and 7 into pairs in more than one way using objects or drawings and equations.

## Language Objective

Explain how to decompose the numbers 6 and 7 in more than one way.

## Vocabulary

Review: equation
New: addend

## Lesson Materials

connecting cubes, two-color counters, crayons, MathBoard

| Conceptual |
| :---: | :---: | :---: |
| Build Understanding | | Conceptual and Procedural |
| :---: |
| Connect Concepts and Skills |$\quad$| Procedural |
| :---: |
| Apply and Practice |

## Mathematics Standards

Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 $=2+3$ and $5=4+1$ ).

Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Look for and make use of structure.


## I Can Objective

I can use two different groups of objects or drawings to represent the number 8 in more than one way.

## Learning Objective

Decompose the number 8 into pairs in more than one way using objects or drawings and equations.

## Language Objective

Explain how to decompose the number 8 in more than one way.

## Lesson Materials

connecting cubes, two-color counters, crayons, MathBoard

## Lesson 13.3 Ways to Make 9 Connect Concepts and Skills - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 $=2+3$ and $5=4+1$ ).

Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Look for and make use of structure.


## I Can Objective

I can use two different groups of objects or drawings to represent the number 9 in more than one way.

## Learning Objective

Decompose the number 9 into pairs in more than one way using objects or drawings and equations.

## Language Objective

Explain how to decompose the number 9 in more than one way.

## Lesson Materials

connecting cubes, two-color counters, crayons, MathBoard

## Lesson 13.4 Ways to Make 10 <br> Apply and Practice - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 $=2+3$ and $5=4+1$ ).

Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.


## I Can Objective

I can use two different groups of objects or drawings to represent the number 10 in more than one way

## Learning Objective

Decompose the number 10 into pairs in more than one way using objects or drawings and equations.

## Language Objective

Explain how to decompose make the number 10 in more than one way.

## Lesson Materials

connecting cubes, two-color counters, crayons

## Lesson 13.5 Make 10 from a Given Number

Apply and Practice - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

For any number from 1 to 9 , find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.

## Mathematical Practices and Processes

- Model with mathematics.
- Attend to precision.
- Look for and make use of structure.


## I Can Objective

I can make 10 from a given number, 1-9.

## Learning Objective

Understand how to use objects and drawings to find the number that makes 10 when added to a given number.

## Language Objective

Explain how to make 10 from a given number.

## Lesson Materials

two-color counters, connecting cubes, ten frames

## HMH (into) Math" Grade K

## Unit 3: Geometry

Unit 3 Project: Shape Search
Unit 3 Learning Mindset Focus: Try Again / Collects and Tries Multiple Strategies

## Module 14: Analyze and Compare Three-Dimensional Shapes <br> Recommended Pacing with Assessments: 7 Days

## Module 14 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :--- | :--- | :--- |
| Children classified two- <br> dimensional shapes. | Children correctly name and <br> describe three-dimensional <br> shapes regardless of their <br> orientations or overall size. <br> Children build three- <br> dimensional shapes. | Children will distinguish <br> between defining attributes (e.g., <br> triangles are closed and three- <br> sided) versus non-defining <br> attributes (e.g., color, <br> orientation, overall size); build <br> and draw shapes to possess <br> defining attributes. |

## Module 14 Vocabulary

| cone | a three-dimensional shape with a round base and a point at the top |
| ---: | :--- | :--- |
| cube | a three-dimensional shape with six square faces |
| covered surface | a rounded surface |
| cylinder | a three-dimensional shape with two circular parallel bases and a curved |
| surface |  |
| flat surface | a surface that is not curved |
| solid | a three-dimensional object |
| sphere | a rounded three-dimensional shape such as a ball |
| three-dimensional | solid shapes that have length, width, and height |
| shapes |  |

# Lesson 14.1 Identify and Describe Spheres <br> Build Understanding - 1 Day 

| Conceptual | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Correctly name shapes regardless of their orientations or overall size.

Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").

Analyze and compare two- and threedimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).

## Mathematical Practices and Processes

- Attend to precision.


## I Can Objective

I can describe the characteristics of a sphere.

## Learning Objective

Understand how to identify and describe spheres by using words and comparing spheres with other shapes.

## Language Objective

Use the words sphere and curved surface to explain the characteristics of a sphere.

## Vocabulary

New: curved surface, solid, sphere, threedimensional shapes

## Lesson Materials

objects shaped like spheres

## Lesson 14.2 Identify and Describe Cubes Build Understanding - 1 Day

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Correctly name shapes regardless of their orientations or overall size.

Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").

Analyze and compare two- and threedimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).

Mathematical Practices and Processes

- Attend to precision.


## I Can Objective

I can describe the characteristics of a cube.

## Learning Objective

Understand how to identify and describe cubes by using words and comparing cubes with other shapes.

## Language Objective

Use the words cube and flat surfaces to explain the characteristics of a cube.

## Vocabulary

New: cube, flat surface

## Lesson Materials

classroom objects shaped like cubes, geosolids

## Lesson 14.3 Identify and Describe Cylinders <br> Build Understanding - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Correctly name shapes regardless of their orientations or overall size.

Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").

Analyze and compare two- and threedimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).

Mathematical Practices and Processes

- Attend to precision.


## I Can Objective

I can describe the characteristics of a cylinder.

## Learning Objective

Understand how to identify and describe cylinders by using words and comparing cylinders with other shapes.

## Language Objective

Use the word cylinder and words such as curved and flat to describe cylinders.

## Vocabulary

New: cylinder

## Lesson Materials

geosolid cylinders, classroom objects shaped like cylinders

## Lesson 14.4 Identify and Describe Cones <br> Build Understanding - 1 Day

| Conceptual |
| :---: | :---: | :---: |
| Build Understanding | | Conceptual and Procedural |
| :---: |
| Connect Concepts and Skills | | Procedural |
| :---: |
| Apply and Practice |

## Mathematics Standards

Correctly name shapes regardless of their orientations or overall size.

Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").

Analyze and compare two- and threedimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).

## Mathematical Practices and Processes

- Attend to precision.
- Look for and make use of structure.


## I Can Objective

I can describe the characteristics of a cone.

## Learning Objective

Understand how to identify and describe cones by using words and comparing cones with other shapes

## Language Objective

Use the word cone and words such as curved and flat to describe cones.

## Vocabulary <br> New: cone

## Lesson Materials

crayons; pictures of objects shaped like cones, cylinders, cubes, and spheres; assorted objects shaped like cones

## Lesson 14.5 Build Shapes

Connect Concepts and Skills - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.

## Mathematical Practices and Processes

- Use appropriate tools strategically.
- Attend to precision.


## I Can Objective

I can build a three-dimensional shape when given its description.

## Learning Objective

Understand how to use sticks and clay to build solid shapes.

## Language Objective

Explain how to build a solid shape.

## Lesson Materials

clay, sticks

## HMH (into) Math" Grade K

## Unit 3: Geometry

Unit 3 Project: Shape Search
Unit 3 Learning Mindset Focus: Try Again / Collects and Tries Multiple Strategies

## Module 15: Describe Positions of Objects

Recommended Pacing with Assessments: 5 Days

## Module 15 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :--- | :--- | :--- |
| Children identified and <br> described three-dimensional <br> shapes. | Children use above and below to <br> describe positions of objects. <br> Children use next to and beside <br> to describe positions of objects. <br> Children use in front of and <br> behind to describe positions of <br> objects. | Children will distinguish <br> between defining attributes (e.g., <br> triangles are closed and three- <br> sided) versus non-defining <br> attributes (e.g., color, <br> orientation, overall size). <br> Children will build and draw <br> shapes to possess defining <br> attributes. |

## Module 15 Vocabulary

| above | positional word |
| ---: | :--- |
| behind | positional word |
| below | positional word |
| beside | positional word |
| in front of | positional word |
| next to | positional word |

## Lesson 15.1 Use Above and Below to Describe Position <br> Apply and Practice - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.

## Mathematical Practices and Processes

- Attend to precision.


## I Can Objective

I can represent and describe the position of objects by naming the shape of the objects and using the terms above and below to describe their relative positions.

## Learning Objective

Understand the position of objects in the environment by using the terms above and below.

## Language Objective

Use the terms above and below to describe the position of objects in the environment.

## Vocabulary

New: above, below

## Lesson 15.2 Use Next To and Beside to Describe Position Apply and Practice - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.

## Mathematical Practices and Processes

- Attend to precision.


## I Can Objective

I can represent and describe the position of objects by naming the shape of the objects and using the terms next to and beside to describe their relative positions.

## Learning Objective

Understand the position of objects in the environment by using the terms next to and beside.

## Language Objective

Use the terms next to and beside to describe the position of objects in the environment.

## Vocabulary

New: beside, next to

## Lesson Materials

Three-dimensional shapes, classroom objects shaped like cubes, spheres, cylinders, and cones

## Lesson 15.3 Use In Front Of and Behind to Describe Position

 Apply and Practice - 1 Day| Conceptual | Conceptual and Procedural | Procedural |
| :---: | :---: | :---: |
| Build Understanding | Connect Concepts and Skills | Apply and Practice |

## Mathematics Standards

Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.

## Mathematical Practices and Processes

- Attend to precision.


## I Can Objective

I can represent and describe the position of objects by naming the shape of the objects and using the terms in front of and behind to describe their relative positions.

## Learning Objective

Understand the position of objects in the environment by using the terms in front of and behind.

## Language Objective

Use the terms in front of and behind to describe the position of objects in the environment.

## Vocabulary

New: in front of, behind

## HMH (into) Math" Grade K

## Unit 3: Geometry

Unit 3 Project: Shape Search
Unit 3 Learning Mindset Focus: Try Again / Collects and Tries Multiple Strategies

## Module 16: Analyze and Compare Two-Dimensional Shapes <br> Recommended Pacing with Assessments and Performance Task: 10 Days

## Module 16 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :--- | :--- | :--- |
| Children identified and <br> described three-dimensional <br> shapes. | Children identify and describe <br> circles, squares, triangles, <br> rectangles, and hexagons. <br> Children compose simple <br> shapes. | Children will distinguish <br> between defining attributes <br> versus nondefining attributes. <br> Children will build and draw <br> shapes to possess defining <br> attributes. <br> dimensional and three- <br> dimensional shapes. |

## Module 16 Vocabulary

| cone | a three-dimensional shape with one flat surface and a curved surface |
| ---: | :--- | :--- |
| cube | a three-dimensional shape with six flat surfaces |
| cylinder | a three-dimensional shape with two flat surfaces and a curved surface |
| sphere | a three-dimensional curved shape with no flat surfaces |
| circle | a two-dimensional, or flat, shape with a curve |
| flat | a surface that is not curved |
| hexagon | a two-dimensional, or flat, shape with six straight sides and six vertices |
| rectangle | a two-dimensional, or flat, shape with four straight sides and four square <br> vertices <br> a two-dimensional, or flat, shape with four straight sides of equal length and |
| square | four vertices |
| two-dimensional |  |
| shapes |  |
| triangle | a two-dimensional, or flat, shape with three straight sides and three vertices |

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# Lesson 16.1 Identify and Describe Circles <br> Build Understanding - 1 Day 

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Correctly name shapes regardless of their orientation or overall size.

Analyze and compare two- and threedimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).

Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.

Mathematical Practices and Processes

- Attend to precision.


## I Can Objective

I can identify and describe circles.

## Learning Objective

Understand how to identify and describe circles by using words and comparing circles with other two-dimensional shapes.

## Language Objective

Use words to describe and identify circles.

## Vocabulary

Review: sphere
New: circle, flat, two-dimensional shapes

## Lesson Materials

Semantic Map (Teacher Resource Masters), large shapes (circles, squares, triangles, rectangles), two-dimensional shapes in the classroom

## Lesson 16.2 Identify and Describe Squares <br> Build Understanding - 1 Day

| Conceptual |
| :---: |
| Build Understanding |


| Conceptual and Procedural | Procedural |
| :---: | :---: |
| Connect Concepts and Skills | Apply and Practice |

## Mathematics Standards

Correctly name shapes regardless of their orientation or overall size.

Analyze and compare two- and threedimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).
Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.

## Mathematical Practices and Processes

- Attend to precision.
- Look for and make use of structure.


## I Can Objective

I can identify and describe squares.

## Learning Objective

Understand how to identify and describe squares by using words and comparing squares with other two-dimensional shapes.

## Language Objective

Use words to describe and identify squares.

## Vocabulary

Review: cube, cylinder
New: square

## Lesson Materials

large shapes (circles, squares, rectangles, and triangles) in a variety of colors, two-dimensional objects around the classroom

## Lesson 16.3 Identify and Describe Triangles <br> Build Understanding - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Correctly name shapes regardless of their orientation or overall size.

Analyze and compare two- and threedimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).
Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.

## Mathematical Practices and Processes

- Attend to precision.
- Look for and make use of structure.


## Learning Objective

Understand how to identify and describe triangles by using words and comparing triangles with other two-dimensional shapes.

## Language Objective

Use words to describe and identify triangles.

## Vocabulary

Review: cone
New: triangle

## Lesson Materials

triangle-shaped classroom objects, twodimensional classroom objects

## I Can Objective

I can identify and describe triangles.

## Lesson 16.4 Identify and Describe Rectangles <br> Build Understanding - 1 Day Professional Learning Video

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Correctly name shapes regardless of their orientation or overall size.

Analyze and compare two- and threedimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).

## Mathematical Practices and Processes

- Attend to precision.
- Look for and make use of structure.


## I Can Objective

I can identify and describe rectangles.

## Learning Objective

Understand how to identify and describe a rectangle by using words and comparing rectangles with other two-dimensional shapes.

## Language Objective

Use words to describe and identify rectangles.

## Vocabulary

New: rectangle

## Lesson Materials

paper, two-dimensional objects around the classroom, rectangular objects, square-shaped objects

## Lesson 16.5 Identify and Describe Hexagons

Build Understanding - 1 Day

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Correctly name shapes regardless of their orientation or overall size.

Analyze and compare two- and threedimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).

## Mathematical Practices and Processes

- Attend to precision.
- Look for and make use of structure.

I Can Objective
I can identify and describe hexagons.

## Learning Objective

Understand how to identify and describe hexagons by using words and comparing hexagons with other two-dimensional shapes.

## Language Objective

Use words to describe and identify hexagons.

## Vocabulary

New: hexagon

## Lesson Materials

index cards, two-dimensional objects around the classroom, picture of a regular hexagon, picture of an irregular hexagon

## Lesson 16.6 Compose Simple Shapes <br> Connect Concepts and Skills - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Compose simple shapes to form larger shapes.

## Mathematical Practices and Processes

- Attend to precision.
- Look for and make use of structure.

I Can Objective
I can compose a variety of shapes.

## Learning Objective

Understand how to compose simple shapes using other shapes and join them together.

## Language Objective

Use two-dimensional shapes to compose other simple shapes.

## Lesson Materials

Pattern Blocks (Teacher Resource Masters)

## Lesson 16.7 Compare Two-Dimensional and Three-Dimensional Shapes <br> Apply and Practice - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").

Analyze and compare two- and threedimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).

## Mathematical Practices and Processes

- Attend to precision.
- Look for and make use of structure.


## I Can Objective

I can compare two- and three-dimensional shapes.

## Learning Objective

Understand how to compare and contrast twodimensional and three-dimensional shapes.

## Language Objective

Compare and contrast two-dimensional and three-dimensional shapes.

## Lesson Materials

cards showing images of two-dimensional shapes, cards showing images of threedimensional shapes, various three-dimensional shapes

## HMH (into) Math" Grade K

## Unit 4: Numbers and Operations in Base Ten

Unit 4 Project: Jump to 10-and-More
Unit 4 Learning Mindset Focus: Bounce Back / Manages the Learning Process

## Module 17: Place Value Foundations: Represent Numbers to 20

Recommended Pacing with Assessments: 6 Days

## Module 17 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :--- | :--- | :--- |
| Children used counting and <br> numbers to determine <br> quantities up to ten. | Children decompose numbers to <br> 19 into ten ones and some more <br> ones. <br> Children represent 20. | Children will count to 120. <br> Children will read and write <br> numerals and represent a <br> number of objects with a written <br> numeral. |
| Children will understand that <br> the two digits of a two-digit <br> number represent amounts of <br> tens and ones. |  |  |

## Module 17 Vocabulary

```
eighteen 10 ones and 8 ones
    eleven 10 ones and 1 one
    fifteen 10 ones and 5 ones
    fourteen 10 ones and 4 ones
            more greater than
        nineteen 10 ones and 9 ones
            ones the value of a digit in the ones position on a place value chart
seventeen 10 ones and 7 ones
    sixteen 10 ones and 6 ones
        thirteen 10 ones and 3 ones
            twelve 10 ones and 2 ones
    twenty 10 ones and 10 ones
```


# Lesson 17.1 Compose Ten Ones and Some More Ones to 14 <br> Build Understanding - 1 Day <br> Professional Learning Video 

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18=10+8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.

I Can Objective
I can compose 10 ones and some more ones to represent numbers 11 to 14 .

## Learning Objective

Understand the numbers 11 to 14 by decomposing the numbers into ten ones and some more ones using objects.
Language Objective
Use the words eleven, twelve, thirteen, and fourteen and explain how to decompose numbers into ten ones and some more ones.

## Vocabulary

New: eleven, fourteen, more, ones, thirteen, twelve

## Lesson Materials

connecting cubes, counters, MathBoard

Lesson 17.2 Compose Ten Ones and Some More Ones to 15
Build Understanding - 1 Day

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18=10+8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.

I Can Objective
I can compose 10 ones and some more ones to represent the number 15 .

## Learning Objective

Understand the number 15 by decomposing the number into ten ones and some more ones using objects.

## Language Objective

Use the word fifteen and explain how to decompose numbers into ten ones and some more ones.

## Vocabulary

New: fifteen

## Lesson Materials

connecting cubes, counters, MathBoard

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## Lesson 17.3 Compose Ten Ones and Some More Ones to 19 <br> Build Understanding - 1 Day

| Conceptual |
| :---: | :---: | :---: |
| Build Understanding | | Conceptual and Procedural |
| :---: |
| Connect Concepts and Skills | | Procedural |
| :---: |
| Apply and Practice |

## Mathematics Standards

Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18=10+8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.

I Can Objective
I can compose 10 ones and some more ones to represent numbers 16 to 19 .

## Learning Objective

Understand the numbers 16 to 19 by decomposing the numbers into ten ones and some more ones using objects.
Language Objective
Use the words sixteen, seventeen, eighteen, and nineteen and explain how to decompose numbers into ten ones and some more ones.

## Vocabulary

New: eighteen, nineteen, seventeen, sixteen
Lesson Materials
connecting cubes, counters, MathBoard

## Lesson 17.4 Represent Numbers to 20

Apply and Practice - 1 Day

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18=10+8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.

I Can Objective
I can count and represent numbers to 20.
Learning Objective
Understand the number 20 by counting and representing objects.

## Language Objective

Use the word twenty and explain how to represent the number 20.

## Vocabulary

New: twenty

## Lesson Materials

connecting cubes

## HMH (into Math" Grade K

## Unit 4: Numbers and Operations in Base Ten

Unit 4 Project: Jump to 10-and-More
Unit 4 Learning Mindset Focus: Bounce Back / Manages the Learning Process

## Module 18: Place Value Foundations: Represent Numbers to 20 with a Written Numeral

Recommended Pacing with Assessments and Performance Task: 7 Days

## Module 18 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :--- | :--- | :--- |
| Children used counting and <br> numbers to determine <br> quantities up to 10. | Children read and write <br> numerals from 0 to 20 and <br> represent a number of objects <br> with a written numeral. | Children will count to 120, read <br> and write numerals, and <br> represent a number of objects <br> with a written numeral. <br> Children represented numbers 20. |
| Children compose and <br> decompose numbers from 11 to <br> 19 into ten ones and some <br> further ones. | Children will understand what <br> the two digits of a two-digit <br> number represent, and <br> decompose numbers into tens <br> and ones. |  |

Module 18 Vocabulary

| eighteen | 10 ones and 8 ones |
| ---: | :--- |
| eleven | 10 ones and 1 one |
| fifteen | 10 ones and 5 ones |
| fourteen | 10 ones and 4 ones |
| nineteen | 10 ones and 9 ones |
| seventeen | 10 ones and 7 ones |
| sixteen | 10 ones and 6 ones |
| thirteen | 10 ones and 3 ones |
| twelve | 10 ones and 2 ones |
| twenty | 10 ones and 10 ones |

## Lesson 18.1 Count and Write 11 to 14

Connect Concepts and Skills - 1 Day

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18=10+8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Look for and make use of structure.


## I Can Objective

I can count and write numbers up to 14 and make a group of that many objects.

## Learning Objective

Understand the written numerals by counting and writing 11 to 14 .

## Language Objective

Explain how to count and write 11 to 14.

## Vocabulary

Review: eleven, fourteen, thirteen, twelve

## Lesson Materials

connecting cubes, two-color counters, ten frames, MathBoard

## Lesson 18.2 Count and Write 15

Connect Concepts and Skills - 1 Day

Professional Learning Video

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18=10+8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Look for and make use of structure.


## I Can Objective

I can count and write numbers up to 15 and make a group of that many objects.

## Learning Objective

Understand the written numerals by counting and writing to 15 .

## Language Objective

Explain how to count and write 15.

## Vocabulary

Review: fifteen

## Lesson Materials

connecting cubes, ten frames, two-color counters, MathBoard

## Lesson 18.3 Count and Write 16 to 19

Connect Concepts and Skills - 1 Day

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18=10+8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Look for and make use of structure.


## I Can Objective

I can count and write numbers up to 19 and make a group of that many objects.

## Learning Objective

Understand the written numerals by counting and writing 16 to 19 .

## Language Objective

Explain how to count and write 16 to 19.

## Vocabulary

Review: eighteen, nineteen, seventeen, sixteen

## Lesson Materials

connecting cubes, two-color counters, ten frames, MathBoard

## Lesson 18.4 Count and Write 20

Apply and Practice - 1 Day

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Attend to precision.
- Look for and make use of structure.


## I Can Objective

I can count and write numbers up to 20 and make a group of that many objects.

## Learning Objective

Understand the written numerals by counting and writing to 20 .

## Language Objective

Explain how to count and write 20.

## Vocabulary

Review: twenty

## Lesson Materials

ten frames, two-color counters, connecting cubes

## HMH (into) Math" Grade K

## Unit 5: Measurement

Unit 5 Project: Monkey Tower
Unit 5 Learning Mindset Focus: Bounce Back / Notices Others

## Module 19: Length and Height

Recommended Pacing with Assessments: 5 Days
Module 19 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :--- | :--- | :--- |
| Children classified, counted, and <br> sorted objects. | Children describe length and <br> height by identifying longer, <br> taller, and shorter objects. <br> Children directly compare two <br> objects and describe the <br> difference in length. | Children will order three objects <br> by length. <br> Children will compare the <br> lengths of two objects by using a <br> third object. |

## Module 19 Vocabulary

| height | measurement from base to top |
| ---: | :--- | :--- |
| length | measurement from end to end |
| longer | having a greater length |
| shorter | having a lesser length or height |
| taller | having a greater height |

# Lesson 19.1 Describe Attributes of Length and Height <br> Build Understanding - 1 Day Professional Learning Video 

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

## Mathematical Practices and Processes

- Construct viable arguments and critique the reasoning of others.
- Attend to precision.


## I Can Objective

I can describe the height and length of objects using math language.

## Learning Objective

Understand how to describe attributes of length and height.

## Language Objective

Identify length and height.

## Vocabulary

New: height, length

## Lesson Materials

crayons

## Lesson 19.2 Compare and Describe Lengths <br> Build Understanding - 1 Day

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Directly compare two objects with a measurable attribute in common, to see which object has "more of" /"less of" the attribute, and describe the difference.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Attend to precision.


## I Can Objective

I can compare the lengths of two objects and describe the comparison in a sentence using longer than or shorter than.

## Learning Objective

Understand how to compare the lengths of two objects.

## Language Objective

Use the phrases longer than and shorter than and articulate strategies for comparing lengths.

## Vocabulary

New: longer, shorter
Lesson Materials
crayons

## Lesson 19.3 Compare and Describe Heights

Build Understanding - 1 Day

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference.

## Mathematical Practices and Processes

- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.


## I Can Objective

I can compare the heights of two objects and describe the comparison in a sentence using taller than or shorter than.

## Learning Objective

Understand how to compare the heights of two objects.

## Language Objective

Use the phrases taller than and shorter than and articulate strategies for comparing heights.

## Vocabulary

New: taller
Review: shorter

Lesson Materials
crayons

## HMH (into Math" Grade K

## Unit 5: Measurement

Unit 5 Project: Monkey Tower
Unit 5 Learning Mindset Focus: Bounce Back / Notices Others

## Module 20: Weight

Recommended Pacing with Assessments and Performance Task: 6 Days

## Module 20 Mathematical Progressions

| Prior Learning | Current Development | Future Connections |
| :--- | :--- | :--- |
| Children described length and <br> height by identifying longer, <br> taller, and shorter objects. | Children describe weight as <br> heavy or light. <br> Children directly compared two <br> objects and described the <br> difference in length and height. | Children compare two objects by <br> weight. <br> Children identify more than one <br> attribute in objects and compare <br> two objects by more than one <br> attribute. | | Child length. |
| :--- |
| Children will compare the objects |
| lhird object. |

## Module 20 Vocabulary

| height | measurement from base to top |
| ---: | :--- |
| length | measurement from end to end |
| longer | having a greater length |
| shorter | having a lesser length or height |
| taller | having a greater height |
| heavier | having a greater weight |
| lighter | having a lesser weight |
| weight | the measurement of the pull of gravity on an object |

# Lesson 20.1 Describe Attributes of Weight <br> Build Understanding - 1 Day Professional Learning Video 

| Conceptual <br> Build Understanding | Conceptual and Procedural <br> Connect Concepts and Skills | Procedural <br> Apply and Practice |
| :---: | :---: | :---: |

## Mathematics Standards

Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

## Mathematical Practices and Processes

- Construct viable arguments and critique the reasoning of others.
- Attend to precision.


## I Can Objective

I can describe objects as heavy or light by thinking about what I know about them.

## Learning Objective

Understand how to describe attributes of weight.

## Language Objective

Use the words heavy and light to describe weight.

## Vocabulary

Review: height, length, longer, shorter, taller
New: weight

## Lesson 20.2 Compare and Describe Weights

Connect Concepts and Skills - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference.

## Mathematical Practices and Processes

- Construct viable arguments and critique the reasoning of others.
- Attend to precision.


## I Can Objective

I can identify which object is heavier or lighter and use the words heavier and lighter to describe the attributes of weight.

## Learning Objective

Understand how to compare the weights of two objects and describe the difference.

## Language Objective

Use the terms heavier than and lighter than to compare weights.

## Vocabulary

New: heavier, lighter

## Lesson 20.3 Describe More than One Attribute of an Object Apply and Practice - 1 Day

| Conceptual | Conceptual and Procedural <br> Build Understanding | Procedural <br> Connect Concepts and Skills |
| :---: | :---: | :---: |
| Apply and Practice |  |  |

## Mathematics Standards

Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

## Mathematical Practices and Processes

- Construct viable arguments and critique the reasoning of others.
- Attend to precision.


## I Can Objective

I can use more than one attribute to describe an object.

## Learning Objective

Understand how to describe attributes of weight, length, and height.

## Language Objective

Practice using vocabulary to describe attributes of weight, length, and height.

